

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PROGRESS REPORT AND PETITION FOR )  
APPROVAL OF MODIFICATION OF, AND REVISED )  
COST ESTIMATES RESPECTING CLEAN COAL ) CAUSE NO. 43371  
TECHNOLOGY OF NORTHERN INDIANA PUBLIC )  
SERVICE COMPANY, UNDER THE ONGOING )  
REVIEW PROCESS APPROVED IN CAUSE NO. ) APPROVED: DEC 19 2007  
42150 AND 43188 PURSUANT TO IND. CODE § 8-1-8.7 )

**BY THE COMMISSION:**

David E. Ziegner, Commissioner

Loraine L. Seyfried, Administrative Law Judge

On October 10, 2007, Northern Indiana Public Service Company ("Petitioner," "Company" or "NIPSCO") filed with the Indiana Utility Regulatory Commission ("Commission") its report on the progress of its construction program utilizing clean coal technology ("CCT") approved by the Commission in Cause No. 42150 (November 26, 2002), Cause No. 42515 (February 4, 2004), Cause No. 42737 (January 19, 2005), Cause No. 42935 (December 21, 2005), Cause No. 43144 (December 13, 2006), and Cause No. 43188 (July 3, 2007), and submitted for Commission approval revised cost estimates for the installation of such technology.

Pursuant to notice given as provided by law, proof of which was incorporated into the record, an evidentiary hearing was held in this matter, December 3, 2007, at 10:00 A.M., in Room 222 of the National City Center, 101 West Washington Street, Indianapolis, Indiana. At the hearing, NIPSCO presented its case in chief, consisting of the prefiled testimony and exhibits of Philip W. Pack. The Indiana Office of Utility Consumer Counselor ("OUCC") participated in the hearing and presented the testimony of Cynthia M. Pruett.

Based upon the applicable law and the evidence herein and being duly advised, the Commission now finds that:

1. **Notice and Jurisdiction.** Proper legal notice of the hearing in this case was given and published by the Commission as required by law. Petitioner is a public utility within the meaning of the Public Service Commission Act, as amended, Ind. Code § 8-1-2, and is subject to the jurisdiction of the Commission, in the manner and to the extent provided by Indiana law. The Commission has jurisdiction over the Petitioner and subject matter of this case.

2. **Petitioner's Characteristics.** Petitioner is a public utility organized and existing under Indiana law, with its principal office at 801 E. 86<sup>th</sup> Street, Merrillville, Indiana 46410. NIPSCO owns and operates property and equipment used for the production, transmission, delivery and furnishing of electric utility service to the public in northern Indiana.

3. **Relief Requested.** On November 26, 2002, the Commission approved NIPSCO's NOx Compliance Plan ("NOx Plan") and proposed Environmental Cost Recovery Mechanism ("ECRM"), as set forth in its Rule 47, which provided for ratemaking treatment of NIPSCO's qualified pollution control property ("QPCP"), pursuant to Ind. Code §§ 8-1-2-6.6 and 6.8 and Ind. Code § 8-1-8.7. On February 4, 2004, January 19, 2005, December 21, 2005, and December 13, 2006, the Commission approved revisions of NIPSCO's NOx Plan, by its orders entered in Cause Nos. 42515, 42737, 42935 and 43144, respectively. On July 3, 2007, the Commission approved NIPSCO's plans to comply with the U.S. Environmental Protection Agency's Clean Air Interstate Rules ("CAIR") and Clean Air Mercury Rules ("CAMR"), which plans will require additional emission reductions of sulfur dioxide ("SO2"), nitrogen oxides ("NOx") and mercury ("Hg"), and together with NIPSCO's NOx Plan are hereinafter referred to as NIPSCO's "Compliance Plan." Pursuant to Ind. Code § 8-1-8.7-7, NIPSCO, in this proceeding, requests that the Commission approve additional revisions of its Compliance Plan. A copy of the revised plan as approved by the Commission in Cause No. 43144 was attached as Exhibit A to the Company's petition in this Cause. The Compliance Plan as proposed herein to be further revised and updated for changes in estimated costs, construction start and in-service dates, and a scope addition was attached as Exhibit B to the petition. Exhibit C to the petition described the changes in greater detail.

4. **Summary of Petitioner's Evidence.** Mr. Pack testified regarding the Company's Compliance Plan. He described its revisions and discussed the current construction schedule for their implementation, as well as a current estimate of the costs that will be incurred by the Company. He also discussed new technologies that, if possible, the Company could utilize as part of its Compliance Plan, which, he said, has been designed to evaluate and utilize available technologies in order to pursue the most economical manner in which to meet the state's NOx SIP Call standard of 0.15 lbs/MMBtu and Phase I of CAIR and CAMR. The plan, which continues to evolve, Mr. Pack observed, is the result of studies of various alternatives and reflects the optimal compliance strategies for the Company at this time.

Mr. Pack stated since completion of the studies giving rise to the plan as approved by the Commission in Cause No. 42150, internal NIPSCO working groups have continued to evaluate new information and review assumptions and make improvements to the plan where possible. As new information has arisen, the plan has been modified to reflect a new optimization of results and costs. Such new information can come, Mr. Pack said, in the form of more accurate technology costs, updated market information on energy and emission allowance requirements, prices, and updated information on regulatory rules, as well as new technology breakthroughs. He indicated the objective of this continuing process is to have a compliance plan that reflects what is presently known and reasonably anticipated in the future. For example, he observed, that CAIR and CAMR compliance will require additional reductions of SO2, NOx and Hg. Therefore, part of the Company's compliance strategy is to attempt to execute the compliance roll out so as to leave as much opportunity as practicable for the integration of new technologies, either to reduce the cost of compliance or merge the current plan into a multi-pollutant compliance strategy, or both. The revised plan, he testified, is the latest compliance optimization variation in the Company's planning process.

Addressing the NOx control technologies that are utilized in the Company's Compliance Plan, as modified, Mr. Pack said that the first technology is the Selective Catalytic Reduction

("SCR") technology. This technology, he testified, is the most effective in terms of NOx removal. An SCR is designed to remove at least 85 percent of the NOx emissions by a chemical process that reduces NOx to nitrogen and water. However, SCRs are the most capital intensive of currently available control technologies and take 24 to 36 months to design, procure, and construct. This technology also requires the longest station outage for installation, he observed. NIPSCO's current plan calls for installing four SCR systems on Michigan City Unit 12, Bailly Units 7 and 8 and Schahfer Unit 14.

Mr. Pack observed that Separated Overfired Air and Low NOx Burners are also technologies included in the Company's plan. The Separated Overfired Air technology involves injecting a portion of the combustion air in the furnace at a location above the burners, reducing NOx production. This technology, he testified, is typically used in conjunction with Low NOx Burners, designed to lower the amount of NOx created. These two technologies are capable of reducing NOx emissions by 30 to 50 percent. All of these technologies are presently incorporated into NIPSCO's plan, as revised. The Company has installed advanced low NOx burners with Separated Overfired air systems on Units 17 and 18 at Schahfer. In addition, an Overfired air system has been installed on Bailly Unit 7.

Petitioner's Exhibit B shows further proposed revisions to the Company's Compliance Plan, including construction beginning and completion dates for facilities that have been or will be installed. Mr. Pack observed that the plan's construction schedule has been planned so that it could comply with the state's NOx SIP Call and the CAIR and CAMR in a timely manner, while at the same time permitting the Company to have, together with purchase capability, predictably adequate generation on line to meet the needs of its native load customers. Exhibit B to the Petition also showed NIPSCO's current cost estimates for its revised plan, which he said, are predicated upon the best and most current information available to the Company and the utility industry, and represent the Company's best estimates for the cost of implementing the revised plan. He said the plan is updated at least every 12 months. Exhibit C to the Petition summarized the revisions to the Company's plan since its approval in Cause No. 43144 and the Commission's approval in Cause No. 43188.

Mr. Pack said that none of the CCT the Company is proposing to use in its revised Compliance Plan was in general commercial use on January 1, 1989, and that all of the CCT that the Company is proposing to use is more efficient than conventional technologies in general use as of January 1, 1989. He said that the CCT the Company is proposing will extend the useful life of NIPSCO's existing generating facilities and achieve the required NOx, SO2 and Hg reductions. He said that the use of CCT here may change priority in the dispatching of the Company's generating units if a re-dispatch is necessary to achieve compliance with the law. He knew of no adverse environmental factors associated with by-products resulting from utilization of the proposed CCT. He also opined that use of the proposed CCT in the Company's revised Compliance Plan is in the public interest, because it will allow NIPSCO to continue to meet demands made upon it for electric power, while doing so in an environmentally compliant manner, and at the lowest reasonably achievable cost. Mr. Pack testified that the Company's current estimate of the cost of constructing and implementing the proposed CCT is \$338,465,246, as shown in Petitioner's Exhibit B, which is an increase over the Company's earlier revised estimate of \$336,230,491.

5. **OUCC Testimony.** Ms. Pruett recommended that the Commission approve NIPSCO's Compliance Plan as revised. She observed that project construction cost budgets had been revised to reflect an increase of less than 0.75%, which includes decreases for the Unit 8 SCR, Unit 8 Coal Handling Unit, Unit 12 SCR and Unit 14 SCR construction projects, due to the actual construction costs of these projects being lower than anticipated. She further observed that at Unit 12, NIPSCO is proposing to replace the second catalyst layer on the SCR unit with a larger pitch catalyst, which results in a cost increase of \$2,500,000 and is the primary driver for a net cost increase of \$2,234,755 in expected expenditures for NIPSCO's Compliance Plan. She testified that scheduling the catalyst layer replacement in late 2008 is consistent with the catalyst replacement schedule NIPSCO supplied the OUCC in Cause 43144. She also indicated that NIPSCO's replacing the current catalyst layer with a larger pitch catalyst to resolve the catalyst pluggage problems experienced as a result of large particle ash will extend the life of the catalyst layer and is consistent with her research showing that several U.S. power plants with installed SCRs have experienced similar catalyst blockage issues as NIPSCO. In general, she said, this problem is solved by expanding the pitch of the catalyst, so that more space exists for the large particulates to pass through. According to NIPSCO's current 20 Year Catalyst Management Plan, she said, if NIPSCO replaces the current catalyst layer, the catalyst layer will not need to be replaced again for 10 years. Replacing the catalyst layer in late 2008 will also prepare the SCR unit for year-round operation, which will be required as a result of Phase I of the CAIR NOx Cap going into effect in 2009, she added.

6. **Commission Discussion and Findings.** Based upon the evidence presented, the Commission finds NIPSCO's revised Compliance Plan as described in Petitioner's Exhibit B attached to the Petition should be approved. We find the revised construction cost estimates, scope addition and updated construction start and in-service dates provided by NIPSCO in this Cause are reasonable, and the Compliance Plan, as revised, is in the public interest and should be approved.

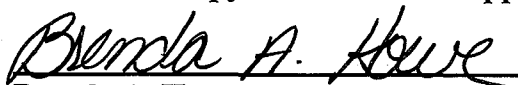
**IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:**

1. Pursuant to Ind. Code § 8-1-8.7-7, NIPSCO's revised Compliance Plan as described in Petitioner's Exhibit B attached to the petition is hereby approved.

2. This Order shall be effective on and after the date of its approval.

**HARDY, GOLC, SERVER AND ZIEGNER CONCUR; LANDIS ABSENT:**  
**APPROVED: DEC 19 2007**

I hereby certify that the above is a true  
and correct copy of the Order as approved.

  
Brenda A. Howe,  
Secretary to the Commission